

REMARKS

Claims 1 – 3 remain in connection with the present application.

Claim 1 is the sole remaining independent claim.

Prior Art Rejection

The Examiner has rejected claims 1 and 2 under 35 U.S.C. §103 as being unpatentable over Di Matteo et al. in view of Poradish et al. This rejection is respectfully traversed.

No Motivation to Combine References

To establish obviousness based on a combination of elements disclosed in the prior art, there must be some motivation, suggestion, or teaching of the desirability of making this specific combination that was made by the Applicant. The motivation, suggestion, or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or in some cases, the nature of the problem to be solved. See *In re Dembiczak*, 50 USPQ2d 1614 (Fed. Cir. 1999). Further, even with various elements of the claimed invention present in two separate embodiments of the same prior art reference, there still must be some motivation to combine the elements from the separate embodiments based on the teachings in the prior art. See *In re Kotzab*, 55 USPQ2d 1313 (Fed. Cir. 2000).

In order to establish *prima facie* case of obviousness under 35 U.S.C. §103(a), the Examiner must provide particular findings as to why the two pieces of prior art are combinable. See *Dembiczak* 50 USPQ2d at 1617. The Examiner must provide both the pieces of the invention and the instructions for putting together the pieces. Broad conclusory statements standing alone

are not “evidence.” Further, it is improper to simply use that which the inventor taught against the teacher. *In re Sang Lee* 277F.3d 1338, 1343-1344 (Fed. Cir. 2002).

In each of the aforementioned cases to Dembiczak, Kotzab, and Sang Lee, the Examiner found pieces of the invention and separate pieces of prior art, or in separate embodiments of a single piece of prior art as was the case in Kotzab. However, in each of these instances, the Court of Appeals for the Federal Circuit held that the Examiner did not find the instructions for putting the pieces together, and thus found that there was not proper motivation for combining references. In the case of Dembiczak, for example, the invention was to a leaf bag, orange in color, including facial indicia of a jack-o-lantern. This “pumpkin leaf bag” was rejected over the combination of a conventional trash bag, and craft books teaching how to decorate paper bags to look like pumpkins. The Court held, in denying the rejection, that the task is merely not one of finding the various pieces to the puzzle, but providing some reasons why one would have been motivated to select and combine the referenced teachings.

Here, the system of Di Matteo et al. is directed to the use of a coded light approach wherein multiple projectors 26, 28, 30, and 32 project light through variable masks 36, and wherein the images are recorded using a plurality of cameras 40. By such a method, by changing patterns, a mechanical or slow patterned generator of the image is created. Accordingly, there is no teaching or suggestion in Di Matteo et al. of providing a faster type of three-dimensional identification of an object using a digital micro-mirror arrangement as set forth in claim 1 for example. Further, there is clearly no teaching or suggestion in Di Matteo et al. of applying its techniques to a type of projection display system as set forth in Poradish et al., and there is further no teaching or suggestion of incorporating the teachings of Poradish et al. and Di Matteo et al.

Poradish et al. is directed to a full-color projection display system for displaying images in, for example, a movie theater. Poradish et al. discloses the acceleration of video projection of successive projection of video signals, corresponding to film in a movie theater, for example. For this type of acceleration of a video projection, Poradish et al. discloses the use of a micro-mirror arrangement.

There is clearly no teaching or suggestion in Poradish et al. of utilizing its micro-mirror arrangement for any type of coding of an object as is set forth in Di Matteo et al. The system in Poradish et al. has nothing to do with utilizing its micro-mirror arrangement for any type of coding of an object, and thus has nothing to do with the system of Di Matteo et al. As such, the teachings of Poradish et al. do not provide any teaching, suggestion, or motivation for applying its teachings of using a digital micro-mirror device to any type of system for coding or identifying an object, let alone a system such as that of Di Matteo et al.

Applicants respectfully submit that the Examiner has merely attempted to find pieces of Applicants' invention, without finding the necessary instructions for putting these pieces together. The Examiner is not entitled to randomly pick and choose portions of references to reject the Applicants' claims, without some teaching or suggestion to combine the references. See *Akzo N. v. ITC*, 1USPQ2d 1241, 1246 (Fed. Cir. 1986). The inquiry is not whether each element existed in the prior art, but whether the prior art made obvious the invention as a whole. As stated *In re Rouffet*, 149f.3d 1350, 1357 (Fed. Cir. 1998) (*emphasis added*):

The Court has explained the purpose of the motivation to combine requirement: to prevent the use of hindsight based on the invention to defeat the patentability of the invention, this Court requires the [challenger] to show motivation to combine the references that create the case of obviousness. In other words, the

[challenger] must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the matter claimed.

This Court has identified three possible solutions for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art and the knowledge of persons of ordinary skill in the art.

Accordingly, Applicants respectfully submit that the test for obviousness of claim 1 of the present application, for example, is not whether not a digital micro-mirror arrangement as set forth in claim 1 exists in the prior art, but whether or not the prior art made obvious the invention as a whole. The Examiner has admitted that Di Matteo et al. provides no teaching or suggestion for the use of such a digital micro-mirror arrangement. As previously stated, the system of Di Matteo et al. masks a plurality of projectors as a slow type of pattern generator. Further, as Poradish et al. only teaches the existence of a digital micro-mirror arrangement, and teaches a completely different use of such a digital micro-mirror arrangement in the area of accelerating a projection display, for use in a movie theater for example, it clearly cannot provide any teaching or suggestion or motivation for uses of such a digital micro-mirror device for image coding as taught by in the system of Di Matteo et al. Accordingly, for at least these reasons, Applicants respectfully submit that the Examiner has not provided proper motivation for combining the teachings of Di Matteo et al. with those of Poradish et al. to render claim 1 of present application obvious.

Claimed Elements Still Missing

Even assuming *arguendo* that Di Matteo et al. and Poradish et al. could be combined, which is clearly not the case for the reasons set forth above, the fact that Poradish et al. teaches merely the use of a digital micro-mirror device does not satisfy the various limitations claimed. In Applicants' method, Applicants do not merely claim a digital micro-mirror device. Instead, they claim driving the digital micro-mirror arrangement "to sequentially illuminate said object surface...for identification of at least three depth planes of said object in a single image".

In Poradish et al., the digital micro-mirror device is merely used for creating a faster type of projection display of an image. There is no use of a digital micro-mirror device to illuminate an object, since Poradish et al. is not concerned with illuminating an object (Poradish et al. has nothing to do with any type of identification of an object). Further, Poradish et al. clearly does not teach or suggest driving a digital micro-mirror arrangement to illuminate an object for identification of the object, since Poradish et al. is not concerned with any object, let alone identification of any object. Thus, as Di Matteo et al. fails to teach or suggest any type of use of a digital micro-mirror arrangement, and as Poradish et al. fails to teach or suggest the claimed use of the digital micro-mirror arrangement for illuminating an object for identification, even assuming *arguendo* that their teachings could be combined, the alleged combination would still fail to teach or suggest at least the invention set forth in claim 1 of the present application.

Accordingly, for at least the aforementioned reasons, the alleged combination of Di Matteo et al. and Poradish et al. would fail to teach or suggest at least claim 1, and thus dependent claim 2, of the present application. Therefore, withdrawal of the Examiner's rejection and allowance of these claims is respectfully requested.

Additional Prior Art Rejection

The Examiner has further rejected claim 3 under 35 U.S.C. §103 as being unpatentable over Di Matteo et al. and Poradish et al., and further in view of Pipitone et al. This rejection is respectfully traversed.

Even assuming *arguendo* that Pipitone et al. could be combined with either one or both of Di Matteo et al. and Poradish et al., which Applicants do not admit, Pipitone et al. would fail to make up for at least the aforementioned deficiencies of Poradish et al. and Di Matteo et al. as previously set forth with regard to claim 1. Accordingly, for at least the reasons previously provided regarding independent claim 1, Applicants respectfully submit that dependent claim 3 is allowable over the prior art of record, even assuming *arguendo* that they could be combined. Thus, withdrawal of the rejection and allowance of claim 3 is respectfully requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of all outstanding objections and rejections and allowance of each of claims 1 – 3 in connection with present application is earnestly solicited.

Entry of the Amendment After-Final is Requested

As the present Amendment After-Final does not include any amendments to the claims, Applicants respectfully submit that this Amendment does not raise any new issues which require further consideration and/or search. Accordingly, entry of the Amendment After-Final is respectfully requested.

Extension of Time

A two- (2) month extension of time, extending the due date for filing a response to this Office Action to July 25, 2003, was filed along with the Notice of Appeal fought concurrently herewith.

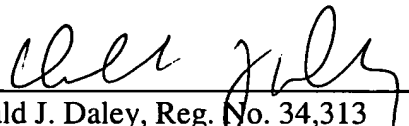
Personal Interview Requested

If the Examiner does not find the enclosed arguments to be persuasive, Applicants respectfully request the Examiner to contact the undersigned at the number listed below, to arrange for a mutually convenient time to conduct a personal interview. As a Notice of Appeal has been filed in connection with the present application, Applicants respectfully request granting of the personal interview within the two-month period for responding to the Notice of Appeal so that, if possible, an interview can be conducted before going to Appeal in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C

By: 
Donald J. Daley, Reg. No. 34,313

DJD/hnd

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000